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EXAMINER

MUSA, ABDELNABI O

ART UNIT	PAPER NUMBER
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2146

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/748,774	Applicant(s) FREY ET AL.	
	Examiner ABDELNABI O. MUSA	Art Unit 2146	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The instant application having Application No. 10/748774 has a total of 66 claims pending in the application; there are 6 independent claims and 60 dependent claims, all of which are ready for examination by the examiner.

Oath/Declaration

2. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in **37 C.F.R. 1.63**.

Priority

3. As required by **M.P.E.P. 201.14(c)**, acknowledgement is made of applicant's claim for priority based on applications filed on 12/30/2003.

Title

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the

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invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim(s) 1-66 are rejected under 35 U.S.C. 102(e) as being anticipated by Kundu Pub.

No (US. 2005/0132041 A1).

As per **claim 1** Kundu teaches a method, comprising:

associating a resource (10) with a monitor managed (40; 50) bean at a node (monitoring entitles for monitoring resources within a data processing network [0011] [0015] [FIG.1]) of a monitor tree (the gateway may decide to send a remote monitor to the consumer entity's local node [0067] [0072]);

requesting monitoring (40; 50) information regarding the associated resource (request monitoring information about the resource [0013] [0018] [FIG.4) from a runtime managed bean (a monitoring manager which is responsive to monitoring requirements (80) of data consumer entity [0021] [0090] [0165]); and

receiving the monitoring information (40) at the node by the monitor managed bean (receiving the monitoring description of the resources [0018] [0042]).

As per **claim 2** Kundu teaches the method of claim 1, further comprising:

receiving a notification from the runtime managed bean at the node by the monitor managed bean (the deployment manager or the coordinator notifies the appropriate entities in the monitoring layer to start monitoring [0090] [0091]), the notification including a signal indicating availability of the monitoring information (the

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gateway matches the current monitoring requirements of consumer entities and the currently available monitoring data of monitoring entities [0044] [0051]); and

in response to receiving the notification, requesting the monitoring information from the runtime managed bean (request monitoring information about the resource [0013] [0018])

As per **claim 3** Kundu teaches the method of claim 1, further comprising:
receiving a notification from a timer including an indication for the monitor managed bean to request the monitoring data (the monitoring entity forwards data based on a response time from per customer [0067] [0075]); and

in response to receiving the notification, requesting the monitoring information from the runtime managed bean (request monitoring information about the resource [0013] [0018])

As per **claim 4** Kundu teaches the method of claim 1, wherein the runtime managed bean includes a resource monitor to monitor one or more resources including the associated resource (monitoring entities to monitor resources [0015] [0063])

As per **claim 5** Kundu teaches the method of claim 4, wherein one or more resources include Java resources associated with a Java 2 Platform, Enterprise Edition (J2EE) engine, the Java resources include one ore more of the following: kernel, services, interfaces, and libraries corresponding to a dispatcher or a server associated

with the J2EE engine. (The monitoring entity is written in Java programming language including resources of web services and supports interfaces enabling pulling of data [0099] [0161])

As per **claim 6** Kundu teaches the method of claim 1, wherein the monitor tree is based on a Java Management Extensions (JMX)-based Java monitoring architecture (a management entity can be software program written in java [0138] [0099])

As per **claim 7** Kundu teaches the method of claim 1, further comprises coupling the monitor tree with a central database and one or more client-level applications using a monitor service (a monitoring entity that forwards data from/to repository to/from customers [0023] [0076]), wherein the monitor service includes one or more of the following: connectors, adaptors, interfaces, and applications (Each Monitoring agent supports interfaces for pull of data by consumers [0162] [0164])

As per **claim 8** Kundu teaches the method of claim 7, further comprises retrieving an Extensible Markup Language (XML) file from the central database using the monitor service (the gateway creates an XML binding document for the consumer entity [0048] [0099]), the XML file having semantics and directives to generate the monitor tree (The gateway receives the request from the consumer with its requirements document in XML [0045] [0065])

As per **claim 9** Kundu teaches the method of claim 1, wherein monitor tree is generated using the semantics and the directives from the XML file (the gateway creates an XML binding document for the consumer entity [0048] [0077])

As per **claim 10** Kundu teaches the method of claim 7, wherein the one or more client-level applications include one or more of the following: a computing center management system, administrative tools, and third party tools (a distributed object processing tools are used [0154] and automatic computing and automatic SLA negotiations for which metrics needed by various consumers may change over time, including at runtime [0092] [0171])

As per **claim 11** Kundu teaches the method of claim 10, wherein the administrative tools include a visual administrator having a monitor viewer to display the monitoring information (A monitoring agent supports interfaces enabling pulling of data monitoring agents also support interfaces for modification of granularity/interval of data bundles, by monitoring services [0161] [0164])

As per **claim 12** Kundu teaches the method of claim 11, wherein the monitor viewer includes one or more of the following: a customized visual administrator monitor viewer, a Web-based monitor viewer, and a Graphical User Interface (GUI)-based monitor viewer (A monitoring agent supports interfaces enabling pulling of data

monitoring agents also support interfaces for modification of granularity/interval of data bundles, by monitoring services [0161] [0164])

As per **claim 13** Kundu teaches the method of claim 11, wherein the monitoring information includes one or more of the following: current monitoring status of the associated resource, monitor history of the associated resource, and general information regarding the associated resource (the monitoring agent can connect to a consumer for control messages or immediate status reports [0158])

As per **claim 14** Kundu teaches the method of claim 13, wherein the current monitoring status includes a color-coded indication of at least one of the following: the associated resource is being monitored, the associated resource is nearing a critical value, the associated resource has reached the critical value, and the associated resource is not being monitored (a selector for comparing monitoring requirements with monitoring capabilities to select a monitoring entity, or to modify the active monitoring functions or entities, may be implemented in computer program code [0026] [0069])

As per **claim 15** Kundu teaches the method of claim 13, wherein the monitor history includes at least one of the following: a one-minute history of the associated resource, a five-minute history of the associated resource, a fifteen-minute history of the associated resource, a thirty-minute history of the associated resource, and a one-hour history of the associated resource (topology information includes a list of bindings

representing which resources are currently being monitored which monitoring entities and which consumer entities are connected to receive data from which monitoring entities [0067] [0018] [0162])

As per **claim 16** Kundu teaches a method, comprising:

receiving a request at the runtime managed bean from a monitor (40; 50) managed bean (monitoring entitles for monitoring resources within a data processing network [0011] [0015]) at a node of a monitor tree (the gateway may decide to send a remote monitor to the consumer entity's local node [0067] [0072]) for monitoring information corresponding to a resource (10) associated with the monitor managed bean (request monitoring information about the resource [0013] [0018]);; and

in response to the request, providing the monitoring information (40) corresponding to the resource (10) (a monitoring manager which is responsive to monitoring requirements of data consumer entity [0021] [0090] [0165]) associated with the monitor managed bean to the monitor (40) managed bean at the node (receiving the monitoring description of the resources [0018] [0042])

As per **claim 17** Kundu teaches the method of claim 16, further comprises providing a runtime notification from the runtime managed bean to the monitor managed bean at the node (the deployment manager or the coordinator notifies the appropriate entities in the monitoring layer to start monitoring [0090] [0091]), the runtime notification including a signal regarding availability of the monitoring information (the gateway

matches the current monitoring requirements of consumer entities and the currently available monitoring data of monitoring entities [0044] [0051])

As per **claim 18** Kundu teaches the method of claim 16, further comprises providing a timer notification from a timer to the monitor managed bean at the node (the monitoring entity forwards data based on a response time from per customer [0067] [0075]), the timer notification including a signal for the monitor managed bean to request the monitoring data from the runtime managed bean (request monitoring information about the resource [0013] [0018])

As per **claim 19** Kundu teaches the method of claim 16, wherein the monitor tree is based on a Java Management Extensions (JMX)-based Java monitoring architecture (a management entity can be software program written in java [0138] [0099])

As per **claim 20** Kundu teaches the method of claim 16, further comprises coupling the monitor tree with a central database and one or more client-level applications using a monitor service (a monitoring entity that forwards data from/to repository to/from customers [0023] [0076]), wherein the monitor service includes one or more of the following: connectors, adaptors, interfaces, and applications (Each Monitoring agent supports interfaces for pull of data by consumers [0162] [0164])

As per **claim 21** Kundu teaches the method of claim 16, wherein the monitoring information includes one or more of the following: current monitoring status of the associated resource, monitor history of the associated resource, and general information regarding the associated resource (the monitoring agent can connect to a consumer for control messages or immediate status reports [0158])

As per **claim 22** Kundu teaches the method of claim 21, wherein the current monitoring status includes a color-coded indication of at least one of the following: the associated resource is being monitored, the associated resource is nearing a critical value, the associated resource has reached the critical value, and the associated resource is not being monitored (a selector for comparing monitoring requirements with monitoring capabilities to select a monitoring entity, or to modify the active monitoring functions or entities, may be implemented in computer program code [0026] [0069])

As per **claim 23** Kundu teaches the method of claim 21, wherein the monitor history includes at least one of the following: a one-minute history of the associated resource, a five-minute history of the associated resource, a fifteen-minute history of the associated resource, a thirty-minute history of the associated resource, and a one-hour history of the associated resource (his topology information includes a list of bindings representing which resources are currently being monitored which monitoring entities and which consumer entities are connected to receive data from which monitoring entities [0067] [0018] [0162])

As per **claim 24** Kundu teaches a Java monitoring architecture, comprising a monitor tree having a plurality of nodes, each of the plurality of nodes corresponding to a monitor managed bean and an associated resource of a plurality of resources (monitoring entitles for monitoring resources within a data processing network [0011] [0015]); and

a runtime managed bean in communication with the plurality of nodes to monitor the plurality of resources (request monitoring information about the resource [0013] [0018]), and to provide monitoring information regarding the associated resource to the monitor managed bean at a node of the plurality of nodes (receiving the monitoring description of the resources [0018] [0042])

As per **claim 25** Kundu teaches the Java monitoring architecture of claim 24, wherein the plurality of resources includes a plurality of Java resources associated with a Java 2 Platform, Enterprise Edition (J2EE) engine, the plurality of Java resources includes one or more of the following: kernel, services, interfaces, and libraries corresponding to a dispatcher or a server associated with the J2EE engine (The monitoring entity is written in Java programming language including resources of web services and supports interfaces enabling pulling of data [0099] [0161])

As per **claim 26** Kundu teaches the Java monitoring architecture of claim 24, further comprises a monitor 27. service to couple the monitor tree with a central

database and one or more client-level applications (a monitoring entity that forwards data from/to repository to/from customers [0023] [0076]), wherein the monitor service includes one or more of the following: connectors, adaptors, interfaces, and applications (Each Monitoring agent supports interfaces for pull of data by consumers [0162] [0164])

As per **claim 27** Kundu teaches the Java monitoring architecture of claim 26, wherein the monitor service to retrieve an Extensible Markup Language (XML) file from the central database service (a monitoring entity that forwards data from/to repository to/from customers [0023] [0076]), the XML file having semantics and directives to generate the monitor tree (The gateway receives the request from the consumer with its requirements document in XML [0045] [0065])

As per **claim 28** Kundu teaches the Java monitoring architecture of claim 24, wherein the monitor tree is generated using the semantics and the directives from the XML file (the gateway creates an XML binding document for the consumer entity [0048] [0077])

As per **claim 29** Kundu teaches the Java monitoring architecture of claim 26, wherein the one or more client-level applications include one or more of the following: a computing center management system, administrative tools, and third party (a distributed object processing tools are used [0154] and automatic computing and

automatic SLA negotiations for which metrics needed by various consumers may change over time, including at runtime [0092] [0171])

As per **claim 30** Kundu teaches the Java monitoring architecture of claim 29, wherein the administrative tools include a visual administrator having a monitor viewer to display the monitoring information (A monitoring agent supports interfaces enabling pulling of data monitoring agents also support interfaces for modification of granularity/interval of data bundles, by monitoring services [0161] [0164])

As per **claim 31** Kundu teaches the Java monitoring architecture of claim 30, wherein the monitor viewer includes one or more of the following: a customized visual administrator monitor viewer, a Web-based monitor viewer, and a Graphical User Interface (GUI)-based monitor viewer (A monitoring agent supports interfaces enabling pulling of data monitoring agents also support interfaces for modification of granularity/interval of data bundles, by monitoring services [0161] [0164])

As per **claim 32** Kundu teaches the Java monitoring architecture of claim 30, wherein the monitoring information includes one or more of the following: current monitoring status of the associated resource, monitor history of the associated resource, and general information regarding the associated resource (the monitoring agent can connect to a consumer for control messages or immediate status reports [0158])

As per **claim 33** Kundu teaches the Java monitoring architecture of claim 32, wherein the current monitoring status includes a color-coded indication of at least one of the following: the associated resource is being monitored, the associated resource is nearing a critical value, the associated resource has reached the critical value, and the associated resource is not being monitored (a selector for comparing monitoring requirements with monitoring capabilities to select a monitoring entity, or to modify the active monitoring functions or entities, may be implemented in computer program code [0026] [0069])

As per **claim 34** Kundu teaches the Java monitoring architecture of claim 32, wherein the monitor history includes at least one of the following: a one-minute history of the associated resource, a five-minute history of the associated resource, a fifteen-minute history of the associated resource, a thirty-minute history of the associated resource, and a one-hour history of the associated resource (topology information includes a list of bindings representing which resources are currently being monitored which monitoring entities and which consumer entities are connected to receive data from which monitoring entities [0067] [0018] [0162])

As per **claim 35** Kundu teaches a Java monitoring system, comprising:
a monitor tree having a plurality of nodes, each of the plurality of nodes corresponding to a monitor managed bean and an associated resource of a plurality of

resources (monitoring entitles for monitoring resources within a data processing network [0011] [0015]);

a runtime managed bean in communication with the plurality of nodes to monitor (40) the plurality of resources, and to provide monitoring information regarding the associated resource to the monitor managed bean at a node of the plurality of nodes (request monitoring information about the resource [0013] [0018]); and

a monitor viewer in communication with the monitor tree via a monitor service to display the monitoring (40;50) information (A monitoring agent supports interfaces enabling pulling of data monitoring agents also support interfaces for modification of granularity/interval of data bundles, by monitoring services [0161] [0164])

As per **claim 36** Kundu teaches the Java monitoring system of claim 35, wherein the monitor service is further to couple the monitor tree with a central database (a monitoring entity that forwards data from/to repository to/from customers [0023] [0076]) comprising an Extensible Markup Language (XML) file having semantics and directives to generate the monitor tree (The gateway receives the request from the consumer with its requirements document in XML [0045] [0065])

As per **claim 37** Kundu teaches the Java monitoring system of claim 35, wherein the monitor service is further to couple the monitor tree with one or more client-level applications having one or more of the following: a computing center management system, administrative tools, and third party tools (a distributed object processing tools

are used [0154] and automatic computing and automatic SLA negotiations for which metrics needed by various consumers may change over time, including at runtime [0092] [0171])

As per **claim 38** Kundu teaches the Java monitoring system of claim 37, wherein the administrative tools include the monitor viewer (A monitoring agent supports interfaces enabling pulling of data monitoring agents also support interfaces for modification of granularity/interval of data bundles, by monitoring services [0161] [0164])

As per **claim 39** Kundu teaches the Java monitoring system of claim 35, wherein the monitor viewer includes a customized visual administrator monitor viewer, a Web-based monitor viewer, and a Graphical User Interface (GUI)-based monitor viewer (A monitoring agent supports interfaces enabling pulling of data monitoring agents also support interfaces for modification of granularity/interval of data bundles, by monitoring services [0161] [0164])

As per **claim 40** Kundu teaches the Java monitoring system of claim 35, wherein the monitor service includes one or more of the following: connectors, adaptors, interfaces, and applications (Each Monitoring agent supports interfaces for pull of data by consumers [0162] [0164])

As per **claim 41** Kundu teaches the Java monitoring system of claim 35, wherein the monitoring information includes one or more of the following: current monitoring status of the associated resource, monitor history of the associated resource, and general information regarding the associated resource (the monitoring agent can connect to a consumer for control messages or immediate status reports [0158])

As per **claim 42** Kundu teaches the Java monitoring system of claim 41, wherein the current monitoring status includes a color-coded indication of at least one of the following: the associated resource is being monitored, the associated resource is nearing a critical value, the associated resource has reached the critical value, and the associated resource is not being monitored (a selector for comparing monitoring requirements with monitoring capabilities to select a monitoring entity, or to modify the active monitoring functions or entities, may be implemented in computer program code [0026] [0069])

As per **claim 43** Kundu teaches the Java monitoring system of claim 41, wherein the monitor history includes at least one of the following: a one-minute history of the associated resource, a five-minute history of the associated resource, a fifteen-minute history of the associated resource, a thirty-minute history of the associated resource, and a one-hour history of the associated resource (topology information includes a list of bindings representing which resources are currently being monitored which

monitoring entities and which consumer entities are connected to receive data from which monitoring entities [0067] [0018] [0162])

As per **claim 44** Kundu teaches the machine-readable medium having stored thereon data representing sets of instructions which, when executed by a machine, cause the machine (a computer readable medium for storing a computer program for performing the operations [0039]) to:

associate a resource with a monitor managed bean at a node of a monitor tree (monitoring entities for monitoring resources within a data processing network [0011] [0015]);

request monitoring information regarding the associated resource from a runtime managed bean (request monitoring information about the resource [0013] [0018]); and

receive the monitoring information at the node by the monitor managed bean (receiving the monitoring description of the resources [0018] [0042]).

As per **claim 45** Kundu teaches the machine-readable medium of claim 44, wherein the sets of instructions which, when executed by the machine, further cause the machine to: receive a notification from the runtime managed bean at the node by the

monitor (40) managed bean (the deployment manager or the coordinator notifies the appropriate entities in the monitoring layer to start monitoring [0090] [0091]), the notification including a signal indicating availability of the monitoring information (the

gateway matches the current monitoring requirements of consumer entities and the currently available monitoring data of monitoring entities [0044] [0051]); and

in response to receiving the notification, request the monitoring information from the runtime managed bean (request monitoring information about the resource [0013] [0018])

As per **claim 46** Kundu teaches the machine-readable medium of claim 44, wherein the sets of instructions which, when executed by the machine, further cause the machine to: receive a notification from a timer including an indication for the monitor managed bean to request the monitoring data (the monitoring entity forwards data based on a response time from per customer [0067] [0075]); and in response to receiving the notification, request the monitoring information from the runtime managed bean (request monitoring information about the resource [0013] [0018]).

As per **claim 47** Kundu teaches the machine-readable medium of claim 44, wherein the runtime managed bean includes a resource monitor to monitor one or more resources including the associated resource (monitoring entities to monitor resources [0015] [0063])

As per **claim 48** Kundu teaches the machine-readable medium of claim 47, wherein one or more resources include Java resources associated with a Java 2 Platform, Enterprise Edition (J2EE) engine, the Java resources include one ore more of

the following: kernel, services, interfaces, and libraries corresponding to a dispatcher or a server associated with the J2EE engine (The monitoring entity is written in Java programming language including resources of web services and supports interfaces enabling pulling of data [0099] [0161])

As per **claim 49** Kundu teaches the machine-readable medium of claim 44, wherein the monitor tree is based on a Java Management Extensions (JMX)-based Java monitoring architecture (a management entity can be software program written in java [0138] [0099])

As per **claim 50** Kundu teaches the machine-readable medium of claim 44, wherein the sets of instructions which, when executed by the machine, further cause the machine to couple the monitor tree with a central database and one or more client-level applications using a monitor service (a monitoring entity that forwards data from/to repository to/from customers [0023] [0076]), wherein the monitor service includes one or more of the following: connectors, adaptors, interfaces, and applications (Each Monitoring agent supports interfaces for pull of data by consumers [0162] [0164])

As per **claim 51** Kundu teaches the machine-readable medium of claim 50, wherein the sets of instructions which, when executed by the machine, further cause the machine to retrieve an Extensible Markup Language (XML) file from the central database using the monitor service (the gateway creates an XML binding document for

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the consumer entity [0048] [0099]), the XML file having semantics and directives to generate the monitor tree (The gateway receives the request from the consumer with its requirements document in XML [0045] [0065])

As per **claim 52** Kundu teaches the machine-readable medium of claim 44, wherein the monitor tree is generated using the semantics and the directives from the XML file (the gateway creates an XML binding document for the consumer entity [0048] [0077])

As per **claim 53** Kundu teaches the machine-readable medium of claim 50, wherein the one or more client-level applications include one or more of the following: a computing center management system, administrative tools, and third party tools (a distributed object processing tools are used [0154] and automatic computing and automatic SLA negotiations for which metrics needed by various consumers may change over time, including at runtime [0092] [0171])

As per **claim 54** Kundu teaches the machine-readable medium of claim 53, wherein the administrative tools include a visual administrator having a monitor viewer to display the monitoring information (A monitoring agent supports interfaces enabling pulling of data monitoring agents also support interfaces for modification of granularity/interval of data bundles, by monitoring services [0161] [0164])

As per **claim 55** Kundu teaches the machine-readable medium of claim 54, wherein the monitor viewer includes one or more of the following: a customized visual administrator monitor viewer, a Web-based monitor viewer, and a Graphical User Interface (GUI)-based monitor viewer (A monitoring agent supports interfaces enabling pulling of data monitoring agents also support interfaces for modification of granularity/interval of data bundles, by monitoring services [0161] [0164])

As per **claim 56** Kundu teaches the machine-readable medium of claim 54, wherein the monitoring information includes one or more of the following: current monitoring status of the associated resource, monitor history of the associated resource, and general information regarding the associated resource (the monitoring agent can connect to a consumer for control messages or immediate status reports [0158])

As per **claim 57** Kundu teaches the machine-readable medium of claim 56, wherein the current monitoring status includes a color-coded indication of at least one of the following: the associated resource is being monitored, the associated resource is nearing a critical value, the associated resource has reached the critical value, and the associated resource is not being monitored (a selector for comparing monitoring requirements with monitoring capabilities to select a monitoring entity, or to modify the active monitoring functions or entities, may be implemented in computer program code [0026] [0069])

As per **claim 58** Kundu teaches the machine-readable medium of claim 56, wherein the monitor history includes at least one of the following: a one-minute history of the associated resource, a five-minute history of the associated resource, a fifteen-minute history of the associated resource, a thirty-minute history of the associated resource, and a one-hour history of the associated resource (topology information includes a list of bindings representing which resources are currently being monitored which monitoring entities and which consumer entities are connected to receive data from which monitoring entities [0067] [0018] [0162])

As per **claim 59** Kundu teaches machine-readable medium having stored thereon data representing sets of instructions which, when executed by a machine (a computer readable medium for storing a computer program for performing the operations [0039]), cause the machine to:

receive a request at a runtime managed bean from a monitor (40) managed bean at a node of a monitor tree (request monitoring information about the resource [0013] [0018]) for monitoring information corresponding to a resource associated with the monitor managed bean (monitoring entitles for monitoring resources within a data processing network [0011] [0015]); and

in response to the request, provide the monitoring information corresponding to the resource (10) associated with the monitor managed bean to the monitor managed bean at the node receiving the monitoring description of the resources [0018] [0042]).

As per **claim 60** Kundu teaches the machine-readable medium of claim 59, wherein the sets of 61. instructions which, when executed by the machine, further cause the machine to provide a runtime notification from the runtime managed bean to the monitor managed bean at the node (the deployment manager or the coordinator notifies the appropriate entities in the monitoring layer to start monitoring [0090] [0091]), the runtime notification including a signal regarding availability of the monitoring information (the gateway matches the current monitoring requirements of consumer entities and the currently available monitoring data of monitoring entities [0044] [0051])

As per **claim 61** Kundu teaches the machine-readable medium of claim 59, wherein the sets of instructions which, when executed by the machine, further cause the machine to provide a timer notification from a timer to the monitor managed bean at the node (the monitoring entity forwards data based on a response time from per customer [0067] [0075]);, the timer notification including an indication for the monitor managed bean to request the monitoring data from the runtime managed bean (request monitoring information about the resource [0013] [0018])

As per **claim 62** Kundu teaches the machine-readable medium of claim 59, wherein the monitor tree is based on a Java Management Extensions (JMX)-based Java monitoring architecture (a management entity can be software program written in java [0138] [0099])

As per **claim 63** Kundu teaches the machine-readable medium of claim 59, wherein the sets of instructions which, when executed by the machine, further cause the machine to couple the monitor tree with a central database and one or more client-level applications using a monitor service (a monitoring entity that forwards data from/to repository to/from customers [0023] [0076]), wherein the monitor service includes one or more of the following: connectors, adaptors, interfaces, and applications (Each Monitoring agent supports interfaces for pull of data by consumers [0162] [0164])

As per **claim 64** Kundu teaches the machine-readable medium of claim 59, wherein the monitoring information includes one or more of the following: current monitoring status of the associated resource, monitor history of the associated resource, and general information regarding the associated resource (the monitoring agent can connect to a consumer for control messages or immediate status reports [0158])

As per **claim 65** Kundu teaches the machine-readable medium of claim 64, wherein the current monitoring status includes a color-coded indication of at least one of the following: the associated resource is being monitored, the associated resource is nearing a critical value, the associated resource has reached the critical value, and the associated resource is not being monitored (a selector for comparing monitoring requirements with monitoring capabilities to select a monitoring entity, or to modify the

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active monitoring functions or entities, may be implemented in computer program code [0026] [0069])

As per **claim 66** Kundu teaches the machine-readable medium of claim 64, wherein the monitor history includes at least one of the following: a one-minute history of the associated resource, a five-minute history of the associated resource, a fifteen-minute history of the associated resource, a thirty-minute history of the associated resource, and a one-hour history of the associated resource (topology information includes a list of bindings representing which resources are currently being monitored which monitoring entities and which consumer entities are connected to receive data from which monitoring entities [0067] [0018] [0162])

Prior Art

6. The following prior art from the updated search made of record and not relied upon:

- Chong et al. Pub. No. (US 2004/0064552 A1)
- Chang et al. Patent. No. (US 6,950,874 B2)
- Srivastava et al. Pub. No. (US 2003/0236880 A1)

Conclusion

When responding to this office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present, in view of the state of the

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art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections See 37 CFR 1.111(c).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdelnabi O. Musa whose telephone number is 571-2701901. The examiner can normally be reached on Monday Thru Friday: 7:30am to 5:00pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Pwu can be reached on 571-2726798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A.M

/Jeffrey C Pwu/
Supervisory Patent Examiner, Art Unit 2146